CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of the Claims:

1-25. (Canceled)

1   26.   (Currently Amended) A method of controlling traffic on a data network, said

2   traffic comprising payload data and associated signaling data, the method

3   comprising:

4   reading a portion of said payload data for a first traffic of a first

5   communications session between a first entity and a second entity communicating

6   over said data network;

7   ~~determining~~ using a signature in the portion of the payload data to determine

8   whether said portion of the payload data identifies ~~a traffic content type~~ peer-to-

9   peer (P2P) traffic;

10   storing signaling data associated with said portion of the payload data;

11   reading signaling data for a second traffic of a ~~further or resumed~~ second

12   communications session on said data network; ~~and~~

13   comparing said read signaling data with said stored signaling data to identify

14   said second traffic as ~~a further~~ the P2P traffic ~~of said controlled traffic content type~~;

15   and

16   controlling said ~~further or resumed~~ second communications session

17 responsive to said identification of the P2P traffic, by limiting propagation of the

18 P2P traffic without limiting propagation of non-P2P traffic.

1   27.   (Currently Amended) ~~A method as claimed in~~ The method of claim 26,

2   wherein said controlling further comprises:

3   controlling a route of said ~~further or resumed~~ second communications session

4   traffic.

1   28.   (Currently Amended) ~~A method as claimed in~~ The method of claim 26, further

2   comprising:

3   ~~wherein said reading of signaling data for the second traffic includes~~

4   reading at least a portion of said signaling data for said second traffic~~;~~

5   ~~wherein said method includes~~

6   determining from said signaling data an address of an originator of said

7   ~~further or resumed~~ second communications session, said originator comprising one

8   of said first and second entities;[[,]] and ~~wherein said method comprises~~

9   sending a signal to said originator using said determined address.

1   29.   (Currently Amended) ~~A method as claimed in~~ The method of claim 26,

2   wherein said controlling further comprises:

3   signaling with said signaling data.

1   30.   (Currently Amended) ~~A method as claimed in~~ The method of claim 26,

2   wherein said controlling further comprises:

3   sending a message in said payload data.

1   31.   (Currently Amended) ~~A method as claimed in~~ The method of claim 30,

2   wherein said message includes a request to retry establishing said ~~further or~~

3   ~~resumed~~ second communications session.

1   32.   (Currently Amended) ~~A method as claimed in~~ The method of claim 26,

2   wherein said storing is responsive to said determining.

1   33.   (Currently Amended) ~~A method as claimed in~~ The method of claim 26,

2   wherein said reading of the portion of said payload data for the first traffic further

3   comprises:

4   reading first payload data for a communication from said first to said second

5   entity and second payload data for a communication from said second to said first

6   entity, and wherein said determining whether said portion of payload data

7   identifies ~~a controlled traffic content type~~ the P2P traffic; and

8   determines whether both said first and said second payload data ~~are of said~~

9   ~~controlled traffic content type~~ contain the P2P traffic.

1   34.   (Currently Amended) ~~A method as claimed in~~ The method of claim 33, further

2   comprising

3   buffering said first and second payload data for said determining.

       35.   (Canceled).

1   36.   (Currently Amended) ~~A method as claimed in~~ The method of claim 26, further

2   comprising:

3   signaling, responsive to said determining, to at least one of said first and

4   second entities to interrupt said communications session.

1   37.   (Currently Amended) ~~A method as claimed in~~ The method of claim 26,

2   wherein said second traffic comprises an attempt to begin a further communications

3   session of ~~said controlled traffic content type~~ the P2P traffic or to resume said

4   communications session, and wherein said controlling further comprises:

5   controlling traffic of said ~~further or resumed~~ second communications session.

38.   (Currently Amended) ~~A method as claimed in~~ The method of claim 26, wherein said network comprises a packet data network and wherein said signaling data includes a destination identifier.

39.   (Currently Amended) ~~A method as claimed in~~ The method of claim 38, wherein said network comprises an internet protocol (IP) network~~, in particular a transmission control protocol (TCP) IP network,~~ and wherein said signaling data includes a destination address and port number.

40.   (Currently Amended) ~~A method as claimed in~~ The method of claim 26, wherein said traffic content type to be controlled includes ~~peer-to-peer~~ P2P protocol network traffic employing a variable TCP port number for ~~peer-to-peer~~ P2P connections.

41.   (Currently Amended) ~~A method as claimed in~~ The method of claim 40, wherein said controlling further comprises:

        routing said ~~peer-to-peer~~ P2P traffic to a ~~peer-to-peer~~ P2P network gateway.

42.   (Currently Amended) ~~A method as claimed in~~ The method of claim 40, wherein said controlling further comprises:

        routing said ~~peer-to-peer~~ P2P traffic to a ~~peer-to-peer~~ P2P network cache.

43-44. (Canceled)

1   45.   (Currently Amended) A router for controlling traffic on a data network, said

2   traffic comprising payload data and associated signaling data, the router

3   comprising:

4   a network interface ~~for interfacing~~ that interfaces with said data network;

5   a packet switch coupled to the network interface that separates the traffic

6   into peer-to-peer (P2P) traffic and non P2P traffic, wherein propagation of the P2P

7   traffic is limited without limiting propagation of the non P2P traffic;

8   a data memory ~~operable to store~~ that stores data to be processed;

9   an instruction memory ~~storing~~ that stores computer executable code; and

10   a processor coupled to said network interface, to said data memory, and to

11   said instruction memory ~~and operable to process~~ that processes said data in

12   accordance with the computer-executable code stored in said instruction memory,

13   whereby said processor is configured to:

14   read a portion of said payload data for a first traffic of a communications

15   session between a first entity and a second entity communicating over said network;

16   using a signature in the portion of the payload data to determine whether

17   said portion of payload data identifies ~~a~~ the P2P traffic ~~content type to be controlled~~;

18   store signaling data associated with said portion of payload data;

19   read signaling data for a second traffic on said network; ~~and to~~

20   compare said read signaling data with said stored signaling data to identify

21   an attempt to begin a ~~further~~ second communications session of said ~~controlled~~ P2P

22   traffic ~~type or to resume said communications session~~; and

23   control said ~~further or resumed~~ second communications session responsive to

24   said identification.

1   46.   (Currently Amended) ~~A router as claimed in~~ The router of claim 45, wherein

2   network comprises a packet data network, wherein said signaling data comprises a

3   destination identifier to identify a destination of a packet of data comprising said

4   first traffic, and wherein said storing stores a destination identifier for said first

5   traffic ~~of said controlled traffic content type~~ that is the P2P traffic in said data

6   memory responsive to identifying said ~~controlled~~ P2P traffic ~~content type~~.

1   47.   (Currently Amended) ~~A router as claimed in~~ The router of claim 46, wherein

2   said processor is further configured to:

3   store portions of said payload data of said communications session sent from

4   both said first and said second entity; and

5   determine when communications from both said first and second entities are

6   ~~of a said controlled~~ the P2P traffic ~~content type~~.

48-52.   (Canceled).